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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/804,550	03/19/2004	Ching-Fong Su	073338.0149 (03-52018 FLA	7434
5073	7590	09/20/2007	EXAMINER	
BAKER BOTTS L.L.P. 2001 ROSS AVENUE SUITE 600 DALLAS, TX 75201-2980			TRAN, PHUC H	
			ART UNIT	PAPER NUMBER
			2616	
			NOTIFICATION DATE	DELIVERY MODE
			09/20/2007	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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## Office Action Summary

**Application No.**

10/804,550

**Applicant(s)**

SU ET AL.

**Examiner**

PHUC H. TRAN

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-54 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-54 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 5/18/04
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Double Patenting*

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-54 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-34 of copending Application No. 10/804,528. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following:

For claims 1-54, the claims 1-34 of the copending application number 10/804,528 disclose a system/method comprising:

a data interface operable to receive data for transmission to a destination node (see claim 1, line 2 of Patent '28); a buffer operable to store the data (see claim 1, line 3 of Patent '28); a transmitting unit operable to couple to an optical transmission medium having a plurality of data channels and to selectively transmit optical signals on the data channels (see claim 1, lines 4-6 of Patent '28); and a controller operable to receive a first token authorizing transmission on one of the data channels, to generate a transmission control message identifying the destination node and the authorized data channel, to communicate the transmission control message to a next node, to communicate a second token to the next node authorizing secondary transmissions on the authorized data channel, to transmit the data on the authorized data channel using the transmitting unit after communicating the transmission control message, and to communicate the first token to the next node after communicating the second token to the next node (see claim 1, lines 7-14 of Patent '28);

wherein the optical node is one of a plurality of optical nodes on an optical communication ring and the second token authorizes other optical nodes on the optical communication ring to transmit the secondary transmissions on the authorized data channel in a section of the

authorized data channel and at a time so as not to conflict with transmission of the data by the optical node (see claim 2, lines 1-6 of Patent '28);

wherein the controller is further operable to communicate the second token to the next node before beginning transmission of the data on the authorized data channel, and to communicate the first token to the next node after completing transmission of the data on the authorized data channel (see claim 3, lines 1-4 of Patent '28);

wherein the controller is further operable to communicate the first token to the next node after a delay, wherein the delay prevents a collision of a first and second transmission on an optical communication ring (see claim 4, lines 1-4 of Patent '28);

wherein the controller is further operable to communicate the first token to the next node after a delay, wherein the delay is equal to a transmission allocation associated with the authorized data channel (see claim 5, lines 1-3 of Patent '28);

wherein the transmitting unit includes a tunable laser, and the controller is further operable to tune the laser to transmit first optical signals associated with the data on the authorized data channel (see claim 6, lines 1-3 of Patent '28);

further comprising: a receiving unit operable to couple to the optical transmission medium and to selectively receive second optical signals on the data channels (see claim 7, lines 2-3 of Patent '28); and an incoming buffer operable to store incoming data (see claim 7, line 4 of Patent '28); wherein the data interface is further operable to transmit the incoming data to a local destination (see claim 7, lines 5-6 of Patent '28); and wherein the controller is further operable to receive a second transmission control message identifying a second destination node and a second

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authorized data channel, to determine whether the optical node is the second destination node, and to receive the second optical signals on the second authorized data channel using the receiving unit after determining that the optical node is the second destination node (see claim 7, lines 7-11 of Patent '28);

wherein the receiving unit includes a tunable filter, and the controller is further operable to tune the filter to receive the second optical signals on the second authorized data channel (see claim 8, lines 1-3 of Patent '28);

Note : See claims 1-34 of the copending application number 10/804,258.

Applicant's Claims 1-54 merely broadens the scope of the copending application Claims 1-34 by eliminating the elements: communicate a second token to the next node authorizing secondary transmissions on the authorized data channel. It has been held that the omission of an element and its function is an obvious expedient if the remaining elements perform the same function as before. In re karlson, 136 USPQ 184 (CCPA). Also note Ex Parte Raine, 186 USPQ 375 (bd. App. 1969); omission of a reference element whose function is not needed would have been obvious to one skilled in the art.

Claims 1,3,4,14,27,40,41,42,53, and 54 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1,8,15,22,29,and 31 of copending Application No. 10/804,528 in view of Karbowiak et al. (4,663,748).

Note: See Claims 1,8,15,22,29,and 31 of the copending application number 10/804,555.

For claims 1,3,4,14,27,40,41,42,53,and 54, the claims 1,8,15,22,29,and 31 of the copending application number 10/804,555 disclose all the subject matter of the claimed

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invention with the exception of transmission allocation in a communication network. Karbowski et al. from the same or similar field of endeavor teaches a provision of the transmission allocation (see column 6 lines 19-27). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the transmission allocation as taught by Karbowski et al. in the communication of the Claims 1,8,15,22,29,and 31 of the copending application number 10/804,555. The transmission allocation can be modified/implemented into the Claims 1,8,15,22,29,and 31 of the copending application number 10/804,555 since Claims 1,8,15,22,29,and 31 of the copending application number 10/804,555 do teach a controller for ring topology. The motivation for using the transmission as taught by Karbowski et al. in the communications network of Claims 1,8,15,22,29,and 31 of the copending application number 10/804,555 being that it reduces congestion traffic.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-5,14,18,23,27,31,40-44, and 53 are rejected under 35 U.S.C. 102(b) as being anticipated by Vesel et al. (U.S. Patent No. 4,993,025).

- With respect to claims 1-5,14,18,23,27,31,40-44, and 53, Vesel discloses a high efficiency image data transfer network comprising: a data interface (see box 52 in figure 2) operable to receive data for transmission to a destination node (see box 72 in figure 2); a buffer

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operable to store the data (see box 37 and 70 in figure 2); a transmitting unit operable to couple to an optical transmission medium(see column 8 line 12) having a plurality of data channels (see column 8 lines 20-24) and to selectively transmit optical signals on the data channels (see column 6 lines 8-19); and a controller operable to receive a token authorizing transmission on one of the data channels, to generate a transmission control message identifying the destination node and the authorized data channel, to communicate the transmission control message for receipt by the destination node, to transmit the data on the authorized data channel using the transmitting unit after communicating the transmission control message, and to communicate the token to a next node (see column 6 lines 39-60);

a plurality of optical communication nodes(see column 6 lines 39-60); optical transmission media interconnecting the optical communication nodes, the optical transmission media having a plurality of data channels; and a plurality of logical tokens corresponding to the data channels(see column 6 lines 8-11); wherein each of the optical communication nodes is operable to: receive data for transmission to a destination one of the optical communication nodes(see column 6 lines 39-60); receive one of the logical tokens; identify one of the data channels associated with the logical token; and transmit the data to the destination optical communication node using the identified data channel(see column 6 lines 39-60);

wherein each of the optical communication nodes is further operable to determine timing information associated with transmission of the data, to identify the timing information in a transmission control message, to communicate the transmission control message for receipt by the destination optical communication node, and to transmit the data in accordance with the timing information (see details of time base in figure 3A);



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wherein each of the optical communication nodes is further operable to communicate the logical token to a next node before transmission of the data on the identified data channel(see column 6 lines 39-60) ;

wherein each of the optical communication nodes is further operable to determine whether to delay communicating the logical token and to communicate the logical token to a next node after a delay in response to determining to delay communicating the logical token (see details of time base in figure 3A);

wherein each of the optical communication nodes includes a transmitting unit that includes a tunable laser, and each of the optical communication nodes is further operable to tune the laser to transmit first optical signals associated with the data on the identified data channel (see column 2 line 58);

wherein each of the optical communication nodes is further operable to couple to a control channel, to receive the logical token on the control channel, and to transmit the logical token on the control channel(see column 6 lines 39-60);

storing the data in a buffer(see box 100 in figure 5); coupling to an optical transmission medium having a plurality of data channels(see column 8 lines 20-24); receiving a token authorizing transmission on one of the data channels; generating a transmission control message identifying the destination node and the authorized data channel; communicating the transmission control message for receipt by the destination node; transmitting the data on the authorized data channel after communicating the transmission control message; and communicating the token to a next node(see column 6 lines 39-60);

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further comprising: determining timing information associated with transmission of the data; identifying the timing information in the transmission control message; and transmitting the data in accordance with the timing information(see details of time base in figure 3A);

further comprising communicating the token to the next node before transmitting the data on the authorized data channel(see column 6 lines 39-60);

further comprising determining whether to delay communicating the token and communicating the token to the next node after a delay in response to determining to delay communicating the token(see details of time base in figure 3A); and

wherein transmitting the data on the authorized data channel includes tuning a laser to transmit first optical signals associated with the data on the authorized data channel (see column 2 line 58).

### ***Claim Rejections - 35 USC § 103***

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 6,19,32,and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vesel et al in view of Dell et al. (2002/0136230).

- With respect to claims 6,19,32,and 45, Vesel discloses all the subject matter of the claimed invention with the exception of selecting queue in a communication network. Dell et al. from the same or similar field of endeavor teaches a provision of the selecting queue (see paragraph 50 ). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the selecting queue as taught by Dell et al. in the communication of Vesel et al. The selecting queue can be modified/implemented into Vesel et al. since Vesel does teach the plurality of buffers. The motivation for using the selecting queue as taught by Dell et al. in the communications network of Vesel et al. being that it makes the system more reliable since it reduces congestion.

7. Claims 7,9,20,36,46 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vesel et al. in view of Fumagalli et al. (7,092,663).

- With respect to claims 7,9,20,36,46 and 49, Vesel discloses all the subject matter of the claimed invention with the exception of control channel in a communication network. Fumagalli from the same or similar field of endeavor teaches a provision of the control channel (see

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column 3 lines 26-28). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the control channel as taught by Fumagalli et al. in the communication of Vesel et al. The control channel can be modified/implemented into Vesel et al. since do teach a controller for ring topology. The motivation for using the control channel as taught by Fumagalli et al. in the communications network of Vesel being that it controls the data and control data separately.

8. Claims 9,13,26,35,39,48,and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vesel in view of Howe (2005/0058149).

- With respect to claims 9,13,26,35,39,48,and 52, Vesel discloses all the subject matter of the claimed invention with the exception of error and size of data in a communication network. Howe from the same or similar field of endeavor teaches a provision of the error and size of data (see paragraph 602). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the error and size of data as taught by Howe in the communication of Vesel et al. The error and size of data can be modified/implemented into since do teach a packet for ring topology. The motivation for using the error and size of data as taught by Howe in the communications network Vesel of being that it make the system more reliable.

### *Conclusion*

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Diaz (4,858,232) is cited to show a system, which is considered pertinent to the claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHUC H. TRAN whose telephone number is (571) 272-3172. The examiner can normally be reached on M-F (8-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, CHI PHAM can be reached on (571) 272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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